



State of Vermont  
Program Development - Structures Section  
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Agency of Transportation

March 28, 2013

RE: Calendar Year 2012 Bridge Inspection Summary Reports

Dear Community Official:

As required by the Federal Surface Transportation Act of 1978, all bridges exceeding 20 feet in span length are inspected on a 24 month cycle. A two-member team performs these inspections with at least one member specially trained for this work. The Agency of Transportation provides these inspections as a service to the municipalities with the cost split between the Federal government (80%) and the State (20%).

Enclosed are the bridge inspection report summaries for structures located in your community which were inspected in calendar year 2012.


In an effort to reduce cost and resources, it is the intent of VTTrans to make this the final year that inspection summary reports will be mailed. In the upcoming months, for all structures on public highways, the most recent report would be available for public viewing and printing under the Agency's VTtransparency website application <http://apps.vtrans.vermont.gov/vtransparency/Default.aspx>.

With approximately 1,500 structures inspected statewide annually, the intent of these inspection summary reports is to provide an inventory of and information on the structural condition and a summary of areas of need only and not to offer an assessment regarding prioritization, preventative maintenance techniques which should be done as good practice, or specific recommendations on how to address deficiencies.

Each report represents a locally owned and maintained structure. As such, the municipality is responsible for the structure. It is recommended that these reports be shared with those individuals charged with upkeep of the structures as failure to address and/or remediate problems areas, stated within the summary section of this report, may result in additional damage or deterioration compromising public safety and/or substantially reducing the service life of the structure.

Please do not hesitate to contact this office or your local District Transportation Administrator with any questions or concerns regarding the content of these summary reports or if you are aware of any structures, exceeding 20 feet in span length, which we are not currently, and should be inspected.

Sincerely,

  
Wm. Michael Hedges, P.E.  
Structures Program Manager

cc: Town File



**STRUCTURE INSPECTION, INVENTORY and APPRAISAL SHEET**

Vermont Agency of Transportation ~ Structures Section ~ Bridge Management and Inspection Unit

Inspection Report for **BURLINGTON**

bridge no.: 00001

District: 5

Located on: **FAU VT127** ove **N.E.C.R.R.**approx. **0.31 MI N MANHATTAN DRIVE** Owner: **04 CITY-OWNED****CONDITION**

Deck Rating: 7 **GOOD**  
Superstructure Rating: 7 **GOOD**  
Substructure Rating: 7 **GOOD**  
Channel Rating: N **NOT APPLICABLE**  
Culvert Rating: N **NOT APPLICABLE**  
Federal Str. Number: 205009000104032  
Federal Sufficiency Rating (April 2011): 097.6  
Deficiency Status of Structure (April 2011): **ND**

**AGE and SERVICE**

Year Built: 1971 Year Reconstructed: 0000  
Service On: 1 **HIGHWAY**  
Service Under: 2 **RAILROAD**  
Lanes On the Structure: 02  
Lanes Under the Structure: 00  
Bypass, Detour Length (miles): 02  
ADT: 016800 % Truck ADT: 06  
Year of ADT: 1997

**GEOMETRIC DATA**

Length of Maximum Span (ft): 0082  
Structure Length (ft): 000084  
Lt Curb/Sidewalk Width (ft): 0.5  
Rt Curb/Sidewalk Width (ft): 0.5  
Bridge Rdwy Width Curb-to-Curb (ft): 44  
Deck Width Out-to-Out (ft): 49.5  
Appr. Roadway Width (ft): 046  
Skew: 10  
Bridge Median: 0 **NO MEDIAN**  
Min Vertical Clr Over (ft): 99 FT 99 IN  
Feature Under: **RAILROAD BENEATH  
STRUCTURE**  
Min Vertical Underclr (ft): 23 FT 09 IN

**STRUCTURE TYPE and MATERIALS**

Bridge Type: **ROLLED BEAM**  
Number of Approach Spans 0000 Number of Main Spans: 001  
Kind of Material and/or Design: 3 **STEEL**  
Deck Structure Type: 9 **OTHER**  
Type of Wearing Surface: 6 **BITUMINOUS**  
Type of Membrane 8 **UNKNOWN**  
Deck Protection: 0 **NONE**

**APPRAISAL \*AS COMPARED TO FEDERAL STANDARDS**

Bridge Railings: 1 **MEETS CURRENT STANDARD**  
Transitions: 1 **MEETS CURRENT STANDARD**  
Approach Guardrail 1 **MEETS CURRENT STANDARD**  
Approach Guardrail Ends: 1 **MEETS CURRENT STANDARD**  
Structural Evaluation: 7 **BETTER THAN MINIMUM CRITERIA**  
Deck Geometry: 6 **EQUAL TO MINIMUM CRITERIA**  
Underclearances Vertical and Horizontal: 7 **BETTER THAN MINIMUM  
CRITERIA**  
Waterway Adequacy: N **NOT OVER WATER**  
  
Approach Roadway Alignment: 8 **EQUAL TO DESIRABLE CRITERIA**  
Scour Critical Bridges: N **NOT OVER WATERWAY**

**DESIGN VEHICLE, RATING, and POSTING**

Load Rating Method (Inv): 1 **LOAD FACTOR (LF)**  
Posting Status: A **OPEN, NO RESTRICTION**  
Bridge Posting: 5 **NO POSTING REQUIRED**  
Load Posting: 10 **NO LOAD POSTING SIGNS ARE NEEDED**  
Posted Vehicle: **POSTING NOT REQUIRED**  
Posted Weight (tons):  
Design Load: 6 **HS 20+MOD**

**INSPECTION and CROSS REFERENCE**

X-Ref. Route:

Insp. Date: 072012

Insp. Freq. (months) 24

X-Ref. BrNum:

**INSPECTION SUMMARY and NEEDS**

07/17/2012 - Bridge has some minor deterioration overall. Alum. bridge rail has some torn components at the northwest corner that could use replacement. Steel beams could use partial cleaning and painting to correct local areas of distress. Galv. binwalls retaining abutment slope material have some progressive deterioration and will require attention within the next 10 years. ~ MJ/DK

The fascia beams could use spot cleaning and painting. The deck is showing signs of leakage especially at the abutment ends and other random areas. The approach and bridge guardrails have some collision damage which should be repaired. 7/23/10 DCP



# STRUCTURE INSPECTION, INVENTORY and APPRAISAL SHEET

Vermont Agency of Transportation ~ Structures Section ~ Bridge Management and Inspection Unit

Inspection Report for BURLINGTON

bridge no.: 00005

District: 5

Located on: FAU VT127 ove WINOOSKI RIVER

approx. 3.43 MI N MANHATTAN DRIVE Owner: 04 CITY-OWNED

## CONDITION

Deck Rating: 7 GOOD

Superstructure Rating: 8 VERY GOOD

Substructure Rating: 8 VERY GOOD

Channel Rating: 8 VERY GOOD

Culvert Rating: N NOT APPLICABLE

Federal Str. Number: 205009000504032

Federal Sufficiency Rating (April 2011): 089.8

Deficiency Status of Structure (April 2011): ND

## AGE and SERVICE

Year Built: 1983 Year Reconstructed: 0000

Service On: 1 HIGHWAY

Service Under: 5 WATERWAY

Lanes On the Structure: 02

Lanes Under the Structure: 00

Bypass, Detour Length (miles): 09

ADT: 013800 % Truck ADT: 07

Year of ADT: 1997

## GEOMETRIC DATA

Length of Maximum Span (ft): 0260

Structure Length (ft): 000680

Lt Curb/Sidewalk Width (ft): 0.5

Rt Curb/Sidewalk Width (ft): 8.1

Bridge Rdwy Width Curb-to-Curb (ft): 42.6

Deck Width Out-to-Out (ft): 55

Appr. Roadway Width (ft): 042

Skew: 00

Bridge Median: 0 NO MEDIAN

Min Vertical Clr Over (ft): 99 FT 99 IN

Feature Under: FEATURE NOT A HIGHWAY  
OR RAILROAD

Min Vertical Underclr (ft): 00 FT 00 IN

## STRUCTURE TYPE and MATERIALS

Bridge Type: 3-SP CONT.HNCH PL GR

Number of Approach Spans 0000

Number of Main Spans: 003

Kind of Material and/or Design: 4 STEEL CONTINUOUS

Deck Structure Type: 1 CONCRETE CIP

Type of Wearing Surface: 6 BITUMINOUS

Type of Membrane 2 PREFORMED FABRIC

Deck Protection: 1 EPOXY COATED REBAR

## APPRAISAL \*AS COMPARED TO FEDERAL STANDARDS

Bridge Railings: 1 MEETS CURRENT STANDARD

Transitions: 1 MEETS CURRENT STANDARD

Approach Guardrail 1 MEETS CURRENT STANDARD

Approach Guardrail Ends: 1 MEETS CURRENT STANDARD

Structural Evaluation: 8 EQUAL TO DESIRABLE CRITERIA

Deck Geometry: 5 BETTER THAN MINIMUM TOLERABLE CRITERIA

Underclearances Vertical and Horizontal: N NOT APPLICABLE

Waterway Adequacy: 8 SLIGHT CHANCE OF OVERTOPPING ROADWAY

Approach Roadway Alignment: 8 EQUAL TO DESIRABLE CRITERIA

Scour Critical Bridges: 8 STABLE FOR SCOUR

## DESIGN VEHICLE, RATING, and POSTING

Load Rating Method (Inv): 2 ALLOWABLE STRESS (AS)

Posting Status: A OPEN, NO RESTRICTION

Bridge Posting: 5 NO POSTING REQUIRED

Load Posting: 10 NO LOAD POSTING SIGNS ARE NEEDED

Posted Vehicle: POSTING NOT REQUIRED

Posted Weight (tons):

Design Load: 9 HS 25

## INSPECTION and CROSS REFERENCE X-Ref. Route:

Insp. Date: 072012 Insp. Freq. (months) 24 X-Ref. BrNum:

## INSPECTION SUMMARY and NEEDS

07/17/2012 - Noted 6" to 8" drop along the west side of the bridge near and between the south pier and the south abutment (roughly the bridge quarter point) was expressed in a inspection soon after the bridge was constructed and appears to be result of deck transition elevation change. Jersey barrier bridge rail needs rehabilitation to correct multiple spalls and section loss. Box beam hand/upper rail is missing roughly 20 connection bolts in various areas. Expansion joint housing could use some concrete repair and the troughs and deck drains need flushing out. A few weeps which are causing corrosion (from their discharge) along the weathering steel superstructure need to be extended. See latest servi lift report for more information ~ MJ/DK

The galvanized bottom hand rail near abutment 2 needs to be repaired. The joints and deck drains need to be cleaned of all debris. The short weep tubes should be extended under the deck in bays 1 and 4. 9/20/10 DCP



# STRUCTURE INSPECTION, INVENTORY and APPRAISAL SHEET

Vermont Agency of Transportation ~ Structures Section ~ Bridge Management and Inspection Unit

Inspection Report for BURLINGTON

bridge no.: 00015

District: 5

Located on: ETHAN ALLEN ovr E A PKY OVER VT 127 approx. 0.95 MI N JCT NORTH ST

Owner: 04 CITY-OWNED

## CONDITION

Deck Rating: 8 VERY GOOD  
Superstructure Rating: 8 VERY GOOD  
Substructure Rating: 8 VERY GOOD  
Channel Rating: N NOT APPLICABLE  
Culvert Rating: N NOT APPLICABLE  
Federal Str. Number: 2004030D1504031  
Federal Sufficiency Rating (April 2011): 082.4  
Deficiency Status of Structure (April 2011): FD

## AGE and SERVICE

Year Built: 1984 Year Reconstructed: 0000  
Service On: 1 HIGHWAY  
Service Under: 1 HIGHWAY  
Lanes On the Structure: 01  
Lanes Under the Structure: 04  
Bypass, Detour Length (miles): 00  
ADT: 015000 % Truck ADT: 06  
Year of ADT: 2008

## GEOMETRIC DATA

Length of Maximum Span (ft): 0150  
Structure Length (ft): 000223  
Lt Curb/Sidewalk Width (ft): 0.5  
Rt Curb/Sidewalk Width (ft): 0.5  
Bridge Rdwy Width Curb-to-Curb (ft): 16  
Deck Width Out-to-Out (ft): 17.6  
Appr. Roadway Width (ft): 018  
Skew: 23  
Bridge Median: 0 NO MEDIAN  
Min Vertical Clr Over (ft): 99 FT 99 IN  
Feature Under: HIGHWAY BENEATH  
STRUCTURE  
Min Vertical Underclr (ft): 15 FT 01 IN

## STRUCTURE TYPE and MATERIALS

Bridge Type: CONT. WELDED GIRDER  
Number of Approach Spans 0000 Number of Main Spans: 003  
Kind of Material and/or Design: 4 STEEL CONTINUOUS  
Deck Structure Type: 1 CONCRETE CIP  
Type of Wearing Surface: 0 NOT APPLICABLE  
Type of Membrane 0 NONE  
Deck Protection: 1 EPOXY COATED REBAR

## APPRAISAL \*AS COMPARED TO FEDERAL STANDARDS

Bridge Railings: 1 MEETS CURRENT STANDARD  
Transitions: 1 MEETS CURRENT STANDARD  
Approach Guardrail 1 MEETS CURRENT STANDARD  
Approach Guardrail Ends: 1 MEETS CURRENT STANDARD  
Structural Evaluation: 6 EQUAL TO MINIMUM CRITERIA  
Deck Geometry: 3 INTOLERABLE, CORRECTIVE ACTION NEEDED  
Underclearances Vertical and Horizontal: 8 EQUAL TO DESIRABLE CRITERIA  
Waterway Adequacy: N NOT OVER WATER  
Approach Roadway Alignment: 8 EQUAL TO DESIRABLE CRITERIA  
Scour Critical Bridges: N NOT OVER WATERWAY

## DESIGN VEHICLE, RATING, and POSTING

Load Rating Method (Inv): 1 LOAD FACTOR (LF)  
Posting Status: A OPEN, NO RESTRICTION  
Bridge Posting: 5 NO POSTING REQUIRED  
Load Posting: 10 NO LOAD POSTING SIGNS ARE NEEDED  
Posted Vehicle: POSTING NOT REQUIRED  
Posted Weight (tons):  
Design Load: 4 H 20

## INSPECTION and CROSS REFERENCE

Insp. Date: 072012 Insp. Freq. (months) 24 X-Ref. BrNum: 00015

## INSPECTION SUMMARY and NEEDS

07/19/2012 - MJ/DK

This structure is in good condition with only some minor shrinkage cracks in the soffit. 7/16/10 DCP

# STRUCTURE INSPECTION, INVENTORY and APPRAISAL SHEET

Vermont Agency of Transportation ~ Structures Section ~ Bridge Management and Inspection Unit

Inspection Report for BURLINGTON

bridge no.: 00D12

District: 5

Located on: FAU TH11 ove FAU TH11 OVER VT127 approx. NORTH AVE. INTERCHANGE

Owner: 04 CITY-OWNED

## CONDITION

Deck Rating: 8 VERY GOOD  
Superstructure Rating: 8 VERY GOOD  
Substructure Rating: 7 GOOD  
Channel Rating: N NOT APPLICABLE  
Culvert Rating: N NOT APPLICABLE  
Federal Str. Number: 2050270D1204032  
Federal Sufficiency Rating (April 2011): 096  
Deficiency Status of Structure (April 2011): FD

## AGE and SERVICE

Year Built: 1984 Year Reconstructed: 0000  
Service On: 1 HIGHWAY  
Service Under: 1 HIGHWAY  
Lanes On the Structure: 02  
Lanes Under the Structure: 05  
Bypass, Detour Length (miles): 00  
ADT: 005000 % Truck ADT: 02  
Year of ADT: 2008

## GEOMETRIC DATA

Length of Maximum Span (ft): 0128  
Structure Length (ft): 000132  
Lt Curb/Sidewalk Width (ft): 0.5  
Rt Curb/Sidewalk Width (ft): 0.5  
Bridge Rdwy Width Curb-to-Curb (ft): 54.7  
Deck Width Out-to-Out (ft): 58.8  
Appr. Roadway Width (ft): 040  
Skew: 00  
Bridge Median: 2 CLOSED MEDIAN (NO BAR  
Min Vertical Clr Over (ft): 99 FT 99 IN  
Feature Under: HIGHWAY BENEATH  
STRUCTURE  
Min Vertical Underclr (ft): 14 FT 09 IN

## STRUCTURE TYPE and MATERIALS

Bridge Type: WELDED PLATE GIRDER  
Number of Approach Spans 0000 Number of Main Spans: 001  
Kind of Material and/or Design: 3 STEEL  
Deck Structure Type: 1 CONCRETE CIP  
Type of Wearing Surface: 6 BITUMINOUS  
Type of Membrane 2 PREFORMED FABRIC  
Deck Protection: 1 EPOXY COATED REBAR

## APPRAISAL \*AS COMPARED TO FEDERAL STANDARDS

Bridge Railings: 1 MEETS CURRENT STANDARD  
Transitions: 1 MEETS CURRENT STANDARD  
Approach Guardrail 1 MEETS CURRENT STANDARD  
Approach Guardrail Ends: 1 MEETS CURRENT STANDARD  
Structural Evaluation: 7 BETTER THAN MINIMUM CRITERIA  
Deck Geometry: 9 SUPERIOR TO DESIRABLE CRITERIA  
Underclearances Vertical and Horizontal: 3 INTOLERABLE, CORRECTIVE  
ACTION NEEDED  
Waterway Adequacy: N NOT OVER WATER  
Approach Roadway Alignment: 8 EQUAL TO DESIRABLE CRITERIA  
Scour Critical Bridges: N NOT OVER WATERWAY

## DESIGN VEHICLE, RATING, and POSTING

Load Rating Method (Inv): 2 ALLOWABLE STRESS (AS)  
Posting Status: A OPEN, NO RESTRICTION  
Bridge Posting: 5 NO POSTING REQUIRED  
Load Posting: 10 NO LOAD POSTING SIGNS ARE NEEDED  
Posted Vehicle: POSTING NOT REQUIRED  
Posted Weight (tons):  
Design Load: 9 HS 25

## INSPECTION and CROSS REFERENCE

Insp. Date: 072012 Insp. Freq. (months) 24 X-Ref. BrNum: 00012

## INSPECTION SUMMARY and NEEDS

07/19/2012 - Plug joints should be installed at each abutment. Leakage is contributing to early signs of abutment distress. The (10) missing box beam bridge rail bolts should be reinstalled. Settlement along the side slopes at the west abutment may require additional attention if displacement continues. ~ MJ/DK

The abutment 1 approach needs have corrective measure made to prevent any further bank erosion and undermining of the wearing surface. The deck could stand to be repaved in the near future. 7/16/10 DCP

\* Stone fill and asphalt was added after this inspection on the north side of abutment 1 to help prevent further erosion on that side.